



Control Number: 48785



Item Number: 129

Addendum StartPage: 0

CONSOLIDATED SOAH DOCKET NO. 473-19-1265
CONSOLIDATED PUC DOCKET NO. 48785

**JOINT APPLICATION OF ONCOR §
ELECTRIC DELIVERY COMPANY §
LLC, AEP TEXAS INC. AND LCRA §
TRANSMISSION SERVICES §
CORPORATION TO AMEND THEIR §
CERTIFICATES OF CONVENIENCE §
AND NECESSITY FOR 345-KV §
TRANSMISSION LINES IN PECOS, §
REEVES, AND WARD COUNTIES, §
TEXAS (SAND LAKE TO SOLSTICE §
AND BAKERSFIELD TO SOLSTICE) §**

BEFORE THE

STATE OFFICE OF

ADMINISTRATIVE HEARINGS

**ONCOR ELECTRIC DELIVERY COMPANY LLC'S AND AEP TEXAS INC.'S
JOINT BRIEF ON UNCONTESTED ISSUES
REGARDING THE SAND LAKE – SOLSTICE PROJECT**

TABLE OF CONTENTS

I.	INTRODUCTION AND SUMMARY	2
II.	PROCEDURAL HISTORY	3
III.	JURISDICTION AND NOTICE	5
IV.	ISSUES RELATING TO THE APPLICATION	6
V.	ROUTE SELECTION	11
VI.	TEXAS PARKS AND WILDLIFE DEPARTMENT	15
VII.	OTHER ISSUES	16
VIII.	CONCLUSION	17
IX.	PROPOSED FINDINGS OF FACT	17
X.	PROPOSED CONCLUSIONS OF LAW	30
XI.	PROPOSED ORDERING PARAGRAPHS	31

129

TO THE HONORABLE ADMINISTRATIVE LAW JUDGES:

COMES NOW Oncor Electric Delivery Company LLC (“Oncor”) and AEP Texas Inc. (“AEP Texas”) (collectively, the “Applicants”) and files this Joint Brief on Uncontested Issues as required by SOAH Order Nos. 2 and 6.¹

I. INTRODUCTION AND SUMMARY

A. Project Overview

This proceeding involves the Applicants’ joint application (“Application”) to amend their respective certificates of convenience and necessity (“CCN”) for a proposed double-circuit 345 kilovolt (“kV”) transmission line in Pecos, Reeves, and Ward Counties, Texas (the “Proposed Project”).² The Proposed Project consists of constructing a new transmission line on double-circuit 345-kV lattice steel tower structures, extending from Oncor’s Sand Lake Switch in Ward County to AEP Texas’ Solstice Switch in Pecos County.³

In February 2018, Oncor submitted a suite of projects known as “Far West Texas Project 2” to the Electric Reliability Council of Texas (“ERCOT”). ERCOT separately reviewed and approved a variation of “Far West Texas Project 2” to include the Proposed Project, with ERCOT’s Board of Directors endorsing the Proposed Project on June 12, 2018, as “critical to reliability” pursuant to 16 Texas Administrative Code (“TAC”) § 25.101(b)(3)(D).⁴ The Proposed Project, therefore, was required to be reviewed under a 180-day timeframe, and ERCOT’s recommendation of the Proposed Project is entitled to great weight in this proceeding.

The Proposed Project will require a typical right-of-way (“ROW”) width of approximately 160 feet, and the centerline will be located in approximately the center of the ROW.⁵ The applicants have not yet acquired any of the ROW for the Proposed Project.⁶

¹ SOAH Order No. 2 at 4 (Dec. 10, 2018); SOAH Order No. 6 at 1 (Feb. 1, 2019) (instructing the Applicants to follow the same table of contents, to the extent possible and applicable, that was used in the Proposal for Decision filed in Docket No. 48095).

² On the same day the Application was filed, LCRA Transmission Services Corporation (“LCRA TSC”) and AEP Texas jointly filed an application to amend their CCN for a proposed double-circuit 345 kV transmission line in Pecos County, Texas to interconnect the Bakersfield and Solstice stations (the “Bakersfield to Solstice Project”), which was assigned Docket No. 48787. On November 15, 2018, Order No. 1 consolidated the Application and the application for the Bakersfield to Solstice Project into Docket No. 48785. SOAH Order No. 1. at 3 (Nov. 15, 2018).

³ Oncor/AEP Ex. ___ at 3 (Peppard Direct).

⁴ Oncor/AEP Ex. ___ at 18 (Kawakami Direct).

⁵ Oncor/AEP Ex. ___ at 4 (Peppard Direct).

⁶ Oncor/AEP Ex. ___ at 4 (Peppard Direct).

The Application included one route that Applicants believe best meets the requirements of PURA and the Commission's rules (route 320)⁷ and 28 additional alternative routes for the Proposed Project, which were selected from among 408 preliminary alternative routes developed by Halff Associates, Inc. ("Halff") as reflected in the environmental and alternative route analysis filed with the Application.⁸ The 29 alternative routes filed with the Application are geographically diverse and differ with respect to route length, cost, number of habitable structures, and utilization of existing compatible corridors.⁹ More specifically, the Proposed Project's routes range in length from approximately 44.5 miles to 58.7 miles and range in cost from approximately \$98,220,000 to \$126,903,000, excluding station costs at Sand Lake and Solstice.¹⁰ The number of habitable structures within 500 feet of the alternative routes ranges from two to sixty-six.¹¹

Route 320 is approximately 44.5 miles long and is the shortest route filed with the Application.¹² Furthermore, route 320 is estimated to cost \$98,220,000, excluding station costs, which is the least expensive alternative route and \$28,683,000 less than the most expensive of the twenty-nine alternative routes filed with the Application.¹³

B. Supported Route and the ALJs' Recommendation

[Briefing under this heading relates to contested routing issues]

II. PROCEDURAL HISTORY

On November 7, 2018, the Applicants filed the Application and the direct testimony of their witnesses, Brent R. Kawakami, Wilson P. Peppard, Russell J. Marusak, Thomas J. Reynolds, III, and Brenda J. Perkins. The Commission issued an order of referral and preliminary order on November 14, 2018, referring this matter to the State Office of Administrative Hearings (SOAH). On November 15, 2018, SOAH Order No. 1 was issued, granting the Applicants' and LCRA TSC's joint motion to consolidate Commission docket numbers 48785 and 48787.¹⁴ Moreover, in addition to granting the Applicants' requested protective order, SOAH Order No. 1 provided notice of a prehearing conference, described jurisdiction, requested a proposed procedural schedule,

⁷ Oncor/AEP Ex. __ (Perkins Direct), Exhibit BJP-5 (routing memorandum).

⁸ Oncor/AEP Ex. __ at 7-9 (Perkins Direct); Application Attachment No. 1.

⁹ Oncor/AEP Ex. __ at 7 (Perkins Direct).

¹⁰ Oncor/AEP Ex. __ at 7 (Perkins Direct); Application at 4, 6 and Application Attachment No. 3.

¹¹ Oncor/AEP Ex. __ at 7 (Perkins Direct).

¹² Oncor/AEP Ex. __ at 8-9 (Perkins Direct).

¹³ Oncor/AEP Ex. __ at 8-9 (Perkins Direct).

¹⁴ SOAH Order No. 1 at 3 (Nov. 15, 2018).

referenced the statutes and rules involved, established filing and service requirements, informed parties that they were required to file written testimony or a statement of position, emphasized that any party who failed to file written testimony or a statement of position would be dismissed from the proceeding, and provided other information.¹⁵

On December 10, 2018, SOAH Order No. 2 was issued wherein the administrative law judges (“ALJs”) memorialized the prehearing conference held on November 27, 2018, adopted a procedural schedule, and suspended the requirement of traditional service.¹⁶ SOAH Order No. 2 also granted intervenor status to various parties.¹⁷ From January 8-10, 2019, various intervenors filed direct testimony or a statement of position. On January 15, 2019, SOAH Order No. 3 granted intervenor status to additional parties and the withdrawal of a party.¹⁸

Also on January 15, 2019, TPWD filed a letter in the docket with various comments and recommendations regarding the Proposed Project.

The Applicants and LCRA TSC filed a joint letter on January 18, 2019, in compliance with SOAH Order No. 3, identifying the intervenors who did not file direct testimony or a statement of position as of the date of the letter. That same day, Commission Staff filed an objection to and motion to strike portions of certain intervenors’ direct testimony. On January 24, 2019, SOAH Order No. 4 was issued identifying intervenors who failed to file testimony or a statement of position by the January 10, 2019, deadline and proposed to remove these intervenors as parties to the proceeding.¹⁹ On January 30, 2019, SOAH Order No. 5 was issued, which overruled Commission Staff’s objections and denied the motion to strike but granted Commission Staff’s alternative request, determining that the direct testimony at issue will be considered intervenor statements of concern and given the appropriate evidentiary weight.

Commission Staff filed the direct testimony of its witness, David Bautista, on January 30, 2019. On February 4, 2019, COG Operating LLC (“COG”) filed the cross-rebuttal testimony of Brent Lowery, and Oxy²⁰ filed the cross-rebuttal testimony of Albert Mendoza.

¹⁵ SOAH Order No. 1 at 3-11 (Nov. 15, 2018).

¹⁶ SOAH Order No. 2 at 3-6 (Dec. 10, 2018).

¹⁷ SOAH Order No. 2 at 2 (Dec. 10, 2018).

¹⁸ SOAH Order No. 3 at 2 (Jan 15, 2019).

¹⁹ SOAH Order No. 4 at 1-2 (Jan. 24, 2019).

²⁰ Oxy is comprised of Occidental Permian Ltd.; Oxy Delaware Basin, LLC; Oxy USA Inc.; Oxy USA WTP LP; Houndstooth Resources, LLC; and Occidental West Texas Overthrust, Inc.

On February 6, 2019, the Applicants filed the rebuttal testimony of Wilson P. Peppard, Russell J. Marusak, Thomas J. Reynolds, III, and Brenda J. Perkins. Additionally, the Applicants moved to admit the direct testimony of Brent R. Kawakami into the evidentiary record because there was no challenge to project need. In conjunction with moving to admit testimony, the Applicants requested cancellation of the need phase hearing on the merits and proposed a prehearing conference in lieu of the hearing. On February 8, 2019, SOAH Order No. 6 was issued, which cancelled the need phase of the hearing on the merits, scheduled a prehearing conference in its place, and admitted Mr. Kawakami's testimony into evidence.

III. JURISDICTION AND NOTICE

The Public Utility Commission of Texas (the "Commission") has jurisdiction over this proceeding pursuant to the Public Utility Regulatory Act ("PURA")²¹ §§ 14.001, 32.001, 37.051, 37.053, 37.054, and 37.056. The Texas State Office of Administrative Hearings ("SOAH") has jurisdiction over this proceeding under PURA § 14.053 and Texas Government Code § 2003.049.

The Applicants have complied with the notice requirements of PURA § 37.054 and 16 TAC § 22.52(a). The Applicants provided written notice of the Proposed Project and held a public meeting on August 15, 2018.²² A total of nine people signed in as attending the public participation meeting, including one member of the local media and one local official.²³ One person completed a questionnaire at the public meeting, and the local official attendee provided electronic data on City of Pecos water wells and pipelines following the public meeting.²⁴

The Applicants provided notice of the Application to neighboring utilities, municipalities, county governments, the Department of Defense Siting Clearinghouse, pipeline owners/operators, and directly affected landowners; provided notice of and a copy of the Application to the Office of Public Utility Counsel ("OPUC"); and provided a copy of Halff's Environmental Assessment and Routing Study ("EA") to the Texas Parks and Wildlife Department ("TPWD").²⁵ The Applicants also provided notice of the Application by publication in newspapers having general circulation in the counties where the CCN is being requested.²⁶ The preliminary review by

²¹ Public Utility Regulatory Act, Tex. Util. Code Ann. §§ 11.001-58.302 (West 2016 & Supp. 2017), §§ 59.001-66.016 (West 2007 & Supp. 2017).

²² Application at 19.

²³ Application at 19.

²⁴ Application at 19-20; Oncor/AEP Ex. __ at 9 (Marusak Direct).

²⁵ Oncor/AEP Ex. __ (notice affidavit); Oncor/AEP Ex. __ at 13-14 (Perkins Direct).

²⁶ Oncor/AEP Ex. __ (newspaper notice affidavit); Oncor/AEP Ex. __ at 12-13 (Perkins Direct).

Department of Defense Siting Clearinghouse concluded the project as proposed would have minimal impact on military operations conducted in the area.²⁷

Commission Staff recommended that the Applicants' notice be found sufficient on December 6, 2018,²⁸ and SOAH Order No. 2 approved of Oncor's notice based on Commission Staff's recommendations.²⁹ On January 14, 2019, the Applicants filed a supplemental affidavit and request for approval attesting to re-sent notices provided to certain affected landowners, and SOAH Order No. 4 approved the Applicants' supplemental notice affidavit as compliant with Commission rules.³⁰ No party contested the Applicants' provision of notice. Accordingly, Applicants have complied with 16 TAC § 22.52(a)(1)-(4).

IV. ISSUES RELATING TO THE APPLICATION³¹

A. Application and Route Adequacy

- 1. Is Oncor Electric Delivery Company LLC and AEP Texas, Inc.'s application to amend their respective CCNs adequate? Does the application contain an adequate number of reasonably differentiated alternative routes to conduct a proper evaluation?*

The Applicants' Application is both adequate and sufficient as Commission Staff recommended³² and SOAH Order No. 2 previously determined.³³ It contains 29 geographically diverse routes, more than an adequate number of reasonably differentiated routes from which the Commission may conduct a proper evaluation.³⁴ Moreover, no party contested the adequacy of the filed routes. Accordingly, the Applicants have satisfied Issue No. 1.

²⁷ Application Attachment No. 1, Appendix A at A-41 (DOD letter dated Sept. 17, 2018).

²⁸ Commission Staff's Recommendation on Sufficiency of Notice (Dec. 6, 2018).

²⁹ SOAH Order No. 2 at 2 (Dec. 10, 2018).

³⁰ SOAH Order No. 4 at 3 (Jan. 24, 2019).

³¹ The Commission's Order of Referral and Preliminary Order issued on November 14, 2018, lists eight issues that must be addressed in this docket. To the extent these issues are uncontested, the Applicants address them below.

³² Commission Staff's Recommendation on Sufficiency of Applications (Nov. 26, 2018).

³³ SOAH Order No. 2 at 1-2 (Dec. 10, 2018).

³⁴ Oncor/AEP Ex. __ at 12 (Perkins Direct); Oncor/AEP Exs. __ (hearing maps).

B. Need and Project Alternatives

2. *Are the proposed facilities necessary for the service, accommodation, convenience, or safety of the public within the meaning of PURA § 37.056(a) taking into account the factors set out in PURA § 37.056(c)? In addition,*
 - a) *How does the proposed facility support the reliability and adequacy of the interconnected transmission system?*
 - b) *Does the proposed facility facilitate robust wholesale competition?*
 - c) *What recommendation, if any, has an independent organization, as defined in PURA § 39.151, made regarding the proposed facility?*
 - d) *Is the proposed facility needed to interconnect a new transmission service customer?*

The undisputed evidence in this case shows the Proposed Project is needed for the service, accommodation, convenience, and safety of the public.³⁵ ERCOT, an independent organization under PURA § 39.151, endorsed the Proposed Project as critical to the reliability of the ERCOT transmission system pursuant to 16 TAC § 25.101(b)(3)(D).³⁶ Moreover, ERCOT's recommendation is entitled to great weight under 16 TAC § 25.101(b)(3)(A).³⁷ No party contested the need for the Proposed Project, and Commission Staff likewise recommended approval of the Proposed Project.

The Proposed Project supports the reliability and adequacy of the ERCOT transmission system in Far West Texas. As stated in the Application and Mr. Kawakami's direct testimony, the Proposed Project is needed both to serve rapidly growing area load—primarily due to oil and gas-related uses in this area of West Texas known as the Delaware Basin—as well as associated economic expansion.³⁸ The Proposed Project will serve to prevent future thermal and voltage violations on the existing 69 and 138 kV transmission lines serving the area and allow for continued load growth in this region of Texas.³⁹

As explained in the Application, without the Proposed Project, unsolved contingencies show an inability of Oncor's current 138 kV transmission system in this area (referred to as the "Culberson Loop") to maintain acceptable voltages following a disturbance, resulting in potential

³⁵ Oncor/AEP Ex. __ at 6-9, 18 (Kawakami Direct).

³⁶ Oncor/AEP Ex. __ at 18 (Kawakami Direct).

³⁷ Oncor/AEP Ex. __ at 18-19 (Kawakami Direct).

³⁸ Oncor/AEP Ex. __ at 6-7 (Kawakami Direct).

³⁹ Oncor/AEP Ex. __ at 8-11 (Kawakami Direct).

voltage collapse along these lines where customers already experience pre-contingency voltage stability issues.⁴⁰ ERCOT’s independent review of the project likewise found voltage violations under established reliability criteria.⁴¹ Such scenarios could cause all load on the lines in the area to be dropped.⁴² Between 2012 and 2017, the load on the nearby Culberson Loop lines rose from 29.3 megawatts (“MW”) to 246.4 MW.⁴³ As of October 2018, the highest recorded real-time value based on telemetry data is 395 MW.⁴⁴ Based solely on actual load increases for Oncor substations and confirmed customer load increases (based on financially committed customer contracts), loads on the Culberson Loop lines are expected to increase significantly, with projected 2019 non-coincident summer peak load on these lines of 902 MW, and ultimately 1,549 MW of projected non-coincident summer peak load on these lines by 2022.⁴⁵ If the load projection parameters are expanded to take into account pending requests that are currently being studied and contractually negotiated between Oncor and customers, there is a probable likelihood of even further growth for non-coincident summer peak loads; current projections estimate that, for 2020, the non-coincident summer peak load grows to 1,406 MW; for 2021, it grows to 1,563 MW; and for 2022, it grows to 1,639 MW.⁴⁶

In April 2016, Oncor and AEP Texas submitted for review by ERCOT’s Regional Planning Group (RPG), an independent organization under PURA § 39.151, a suite of projects known as the “Far West Texas Project.”⁴⁷ ERCOT performed steady state and dynamic stability power flow studies during its independent review of the Far West Texas Project and found multiple violations under NERC Reliability Standard TPL-001-4.⁴⁸ ERCOT’s steady state analysis when reviewing the Far West Texas Project identified the following violations: thermal violations on multiple lines in the Barilla Junction Area under single contingencies in both generation cases it studied; unsolvable contingencies; and various voltage violations and unacceptable voltage deviations in the Culberson Loop under one or both cases studied.⁴⁹ ERCOT conducted detailed analyses and tests of four short-listed options and, in June 2017, ERCOT’s Board of Directors endorsed

⁴⁰ Application at 10; Oncor/AEP Ex. __ at 15-18 (Kawakami Direct).

⁴¹ Oncor/AEP Ex. __ at 8-10 (Kawakami Direct).

⁴² Application at 10; Oncor/AEP Ex. __ at 8-10 (Kawakami Direct).

⁴³ Oncor/AEP Ex. __ at 6 (Kawakami Direct).

⁴⁴ Oncor/AEP Ex. __ at 6 (Kawakami Direct).

⁴⁵ Oncor/AEP Ex. __ at 6-7 (Kawakami Direct).

⁴⁶ Oncor/AEP Ex. __ at 7 (Kawakami Direct).

⁴⁷ Oncor/AEP Ex. __ at 9 (Kawakami Direct).

⁴⁸ Oncor/AEP Ex. __ at 10-11 (Kawakami Direct).

⁴⁹ Oncor/AEP Ex. __ at 10-11 (Kawakami Direct).

construction of, among other things, a new 345 kV transmission line extending from Bakersfield to Solstice, to be built by LCRA TSC and AEP Texas on double-circuit-capable 345 kV structures with one 345 kV circuit initially installed, and expansion of Solstice to include the installation of a 345 kV ring-bus arrangement with two 600 MVA, 345/138 kV autotransformers.⁵⁰

In February 2018, Oncor submitted a suite of projects known as the “Far West Texas Project 2” to the ERCOT RPG.⁵¹ ERCOT conducted an independent review of the Far West Texas Project 2, found multiple reliability violations under NERC Reliability Standard TPL-001-4, and conducted detailed analyses of three short-listed options.⁵² In June 2018, ERCOT’s Board of Directors endorsed construction of, among other things, a variation of the proposed Far West Texas Project 2 to include the Sand Lake—Solstice double-circuit 345 kV line, expansion of Sand Lake Switch, and a second circuit on the Bakersfield—Solstice line, and it endorsed them as Tier 1 transmission projects needed to support the reliability of the ERCOT transmission system.⁵³ Further, ERCOT’s Board of Directors endorsed the proposed transmission facilities as critical to the reliability of the ERCOT transmission system pursuant to 16 Texas Administrative Code (TAC) § 25.101(b)(3)(D).⁵⁴

ERCOT determined that the Proposed Project will meet the necessary reliability criteria in the most cost effective manner while also providing multiple expansion paths to accommodate future load growth in the study area.⁵⁵

The Proposed Project facilitates robust wholesale competition by facilitating the delivery of economical electric power at 345 kV from existing and future generation resources located both inside and outside of the area to existing and future electric customers in the area. It will also provide 345 kV transmission service to an area that is not currently served at this voltage.⁵⁶

The need for the Proposed Project is rapid load growth. This load growth is primarily due to oil and natural gas production, processing, and transportation, as well as associated economic expansion in the area as shown in the historical and projected load growth figures.⁵⁷ As discussed

⁵⁰ Oncor/AEP Ex. __ at 11-13 (Kawakami Direct).

⁵¹ Oncor/AEP Ex. __ at 14 (Kawakami Direct).

⁵² Oncor/AEP Ex. __ at 14-18 (Kawakami Direct).

⁵³ Oncor/AEP Ex. __ at 18 (Kawakami Direct).

⁵⁴ Oncor/AEP Ex. __ at 18-19 (Kawakami Direct).

⁵⁵ Oncor/AEP Ex. __ at 17-18 (Kawakami Direct).

⁵⁶ Oncor/AEP Ex. __ at 18 (Kawakami Direct).

⁵⁷ Oncor/AEP Ex. __ at 6 (Kawakami Direct).

supra, Oncor projects this strong load growth to continue.⁵⁸ Given this growth, the Proposed Project will serve many new customers and improve reliability to existing customers in West Texas.

Under PURA § 37.056(c), the Proposed Project is necessary to serve current and projected load that the existing transmission service in the area cannot handle without reliability violations. Approving the Proposed Project would greatly assist the Applicants and other utilities serving this area of West Texas in meeting the rapidly growing needs of electric consumers. Accordingly, Applicants have satisfied Issue No. 2.

3. *Is the transmission project the better option to meet this need when compared to employing distribution facilities? If Oncor Electric Delivery Company LLC and AEP Texas, Inc. [are] not subject to the unbundling requirements of PURA § 39.051, is the project the better option to meet the need when compared to a combination of distributed generation and energy efficiency?*

As stated in the Application and Mr. Kawakami's direct testimony, the Proposed Project is superior to any distribution alternatives because such alternatives would not improve the reliability and operational capacity of the transmission system in the area.⁵⁹ Distribution lines are not practical alternatives to the Proposed Project in addressing the identified reliability needs of the transmission system because they would not improve the reliability and operational capability of the transmission system, and thus a distribution option is not feasible.⁶⁰ All existing transmission facilities in the study areas were constructed and operate at 138 kV, and serve customers directly; thus, upgrading of voltage would require all customers and existing stations to be rebuilt in order to be served from 345 kV.⁶¹ Conductor bundling would not address the reliability and operational issues under the contingencies of concern since any bundled circuits would necessarily be located on the same structures as the existing 138 kV lines in the area.⁶² Additionally, bundling conductors does not provide bi-directional looped service capability which is needed to address the reliability and operational flexibility for existing and future customers.⁶³ Adding transformers would not address the reliability and operational issues under the contingency of concern since new 345/138

⁵⁸ Oncor/AEP Ex. __ at 6-7 (Kawakami Direct) (showing that projected load growth on Culberson Loop—based only on financially committed customer contracts—will reach 1,597 MW by 2023).

⁵⁹ Application at 17; Oncor/AEP Ex. __ at 22-23 (Kawakami Direct).

⁶⁰ Application at 17; Oncor/AEP Ex. __ at 22-23 (Kawakami Direct).

⁶¹ Oncor/AEP Ex. __ at 23 (Kawakami Direct).

⁶² Oncor/AEP Ex. __ at 23 (Kawakami Direct).

⁶³ Oncor/AEP Ex. __ at 23 (Kawakami Direct).

kV transformers within the Culberson Loop would still be served from the planned Odessa EHV—Riverton / Moss—Riverton 345 kV transmission line.⁶⁴ Further, the Applicants are not subject to the unbundling requirements of PURA § 39.051, and consequently the second aspect of this issue is not applicable.

Additionally, ERCOT studied three primary options in its independent review of the Far West Texas Project 2, and each of those options included the Sand Lake – Solstice line because ERCOT considered it a universal upgrade to accommodate future projects and allow for additional load growth on the Culberson Loop.⁶⁵ Alternative pathways for the Proposed Project (*i.e.*, options for connecting stations other than Sand Lake and Solstice with a 345 kV line) were rejected because they would not provide an optimal location for the strong voltage source to address the identified criteria violations under the contingencies required to be studied.⁶⁶ Accordingly, Applicants have satisfied Issue No. 3.

V. ROUTE SELECTION

4. Which proposed transmission line route is the best alternative weighing the factors set forth in PURA § 37.056(c) and 16 TAC § 25.101(b)(3)(B)?

A. Overview

[Briefing under this heading relates to contested routing issues]

B. Adequacy of Existing Service and Need for Additional Service

The Proposed Project is needed for three reasons: (1) to support load growth in the area; (2) to address reliability violations under ERCOT reliability criteria and North American Electric Reliability Corporation (“NERC”) reliability standards; and (3) to provide the infrastructure necessary to facilitate future transmission system expansion and generation development.⁶⁷ Oncor submitted a suite of projects known as “Far West Texas Project 2” to ERCOT’s Regional Planning Group in February 2018.⁶⁸ In its independent review, ERCOT initially evaluated numerous alternatives, and it subsequently endorsed one of three short-listed options, each of which included the Sand Lake – Solstice 345 kV line.⁶⁹ Approximately four months later, the ERCOT Board of

⁶⁴ Oncor/AEP Ex. __ at 23 (Kawakami Direct).

⁶⁵ Oncor/AEP Ex. __ at 21-22 (Kawakami Direct).

⁶⁶ Oncor/AEP Ex. __ at 22 (Kawakami Direct).

⁶⁷ Oncor/AEP Ex. __ at 6, 19 (Kawakami Direct).

⁶⁸ Oncor/AEP Ex. __ at 14 (Kawakami Direct).

⁶⁹ Oncor/AEP Ex. __ at 17-18 (Kawakami Direct).

Directors endorsed a variation of the proposed Far West Texas Project 2, which included the Proposed Project as a Tier 1 transmission project needed to support the reliability of the ERCOT transmission system.⁷⁰ Furthermore, the ERCOT Board of Directors adopted a resolution endorsing the Proposed Project as critical to the reliability of the ERCOT transmission system pursuant to 16 TAC § 25.101(b)(3)(D).⁷¹

As discussed above, the Proposed Project will deliver 345 kV transmission to an area that is not currently served at this voltage and also will address critical reliability issues resulting from rapid load growth in an area of oil and natural gas development and associated economic expansion.⁷² That is, the Proposed Project will support load growth in the area, address reliability violations under ERCOT protocols and NERC reliability standards, and provide infrastructure necessary to facilitate future transmission system expansion.⁷³ Consequently, the Proposed Project is needed to address reliability violations and will also serve to improve service for new and existing customers in the area.

C. Community Values

Based on information Halfff received at and following the public meeting, including additional reconnaissance surveys, it implemented thirty-six modifications to portions of numerous preliminary alternative links that were divided into two renamed links because of a nearby modification, resulting in a net increase of five alternative links.⁷⁴ The preliminary link modifications were made to, among other things, accommodate the City of Pecos water facilities, new oil and gas facilities, and other new construction.⁷⁵

[Remainder of briefing under this heading relates to contested routing issues]

D. Structures: Transmitters, Airports, Airstrips, and Irrigation Systems

[Briefing under this heading relates to contested routing issues]

E. Park and Recreational Areas

[Briefing under this heading relates to contested routing issues]

⁷⁰ Oncor/AEP Ex. ___ at 14 (Kawakami Direct).

⁷¹ Oncor/AEP Ex. ___ at 18 (Kawakami Direct).

⁷² Oncor/AEP Ex. ___ at 24 (Kawakami Direct).

⁷³ Oncor/AEP Ex. ___ at 24 (Kawakami Direct).

⁷⁴ Oncor/AEP Ex. ___ at 9 (Marusak Direct).

⁷⁵ Oncor/AEP Ex. ___ at 9-10 (Marusak Direct); Application Attachment No. 1 at § 6.0.

F. Historical, Cultural, and Aesthetic Values

[Briefing under this heading relates to contested routing issues]

1. Historical, Archeological, or Cultural Resources

[Briefing under this heading relates to contested routing issues]

2. Aesthetic Values

[Briefing under this heading relates to contested routing issues]

G. Environmental Integrity

The EA analyzed the Proposed Project's possible impacts based on numerous environmental factors. The Applicants and Halff, moreover, performed an evaluation of the impacts of the Proposed Project on the environment, including endangered and threatened species.

During the construction of the Proposed Project, the Applicants will, among other things, minimize the amount of flora and fauna disturbed, re-vegetate cleared and disturbed areas using native species and consider landowner preferences in doing so, exercise extreme care to avoid affecting non-targeted vegetation or animal life, and use best management practices to minimize the potential impact to migratory birds and threatened or endangered species. Additionally, the Applicants will implement erosion control measures and return each affected landowner's property to its original contours and grades unless otherwise agreed to by the landowners.

[Remainder of briefing under this heading relates to contested routing issues]

H. Probable Improvement of Service or Lowering of Costs to Consumers

The proposed transmission facilities will not adversely affect other utilities' service in the area and will improve system reliability in the area.⁷⁶ Moreover, the Proposed Project is needed to satisfy reliability and load growth issues in the project area, and it will result in improved service to electric customers.⁷⁷

I. Engineering Constraints

The area encompassing the Proposed Project is undergoing rapid development in energy infrastructure.

⁷⁶ Oncor/AEP Ex. ___ at 19 (Kawakami Direct).

⁷⁷ See, e.g., Oncor/AEP Ex. ___ at 24 (Kawakami Direct).

[Remainder of briefing under this heading relates to contested routing issues]

J. Costs

Oncor intends to finance its portion of the transmission facilities with a combination of debt and equity in compliance with its authorized capital structure.⁷⁸ AEP Texas intends to finance its portion of the transmission facilities with a combination of debt and equity.⁷⁹ Applicants propose splitting ownership of the Proposed Project evenly.⁸⁰

[Remainder of briefing under this heading relates to contested routing issues]

K. Moderation of Impact on Affected Community and Landowners

[Briefing under this heading relates to contested routing issues]

L. Use of Compatible ROWs, Paralleling of Existing ROWs, and Paralleling of Property Lines

[Briefing under this heading relates to contested routing issues]

M. Prudent Avoidance

[Briefing under this heading relates to contested routing issues]

N. Alternative Routes or Facility Configurations

1. Specific Alternatives and Cost

5. *Are there alternative routes or facilities configurations that would have a less negative impact on landowners? What would be the incremental cost of those routes?*

[Briefing under this heading relates to contested routing issues]

⁷⁸ Application at 8.

⁷⁹ Application at 8.

⁸⁰ Application at 9.

2. Landowner Contributions

6. *If alternative routes or facility configurations are considered due to individual landowner preference:*
- a) *Have the affected landowners made adequate contributions to offset any additional costs associated with the accommodations?*
 - b) *Have the accommodations to landowners diminished the electric efficiency of the line or reliability?*

[Briefing under this heading relates to contested routing issues]

VI. TEXAS PARKS AND WILDLIFE DEPARTMENT

7. *On or after September 1, 2009, did the Texas Parks and Wildlife Department provide any recommendations or informational comments regarding this application pursuant to Section 12.0011(b) of the Texas Parks and Wildlife Code? If so, please address the following issues:*
- a) *What modifications, if any, should be made to the proposed project as a result of any recommendations or comments?*
 - b) *What conditions or limitations, if any, should be included in the final order in this docket as a result of any recommendations or comments?*
 - c) *What other disposition, if any, should be made of any recommendations or comments?*
 - d) *If any recommendation or comment should not be incorporated in this project or the final order, or should not be acted upon, or is otherwise inappropriate or incorrect in light of the specific facts and circumstances presented by this application or the law applicable to contested cases, please explain why that is the case.*

TPWD's comment letter recommends certain construction practices, such as fencing, covering, soil stabilization, and species exclusion techniques, as well as facility modifications such as bird diverters and covered energized components. These recommendations and Applicants' incorporation of many of them as part of their standard practices are detailed in Mr. Peppard's and Mr. Reynolds' rebuttal testimonies.⁸¹ Some of TPWD's recommendations are impractical and would substantially impair the construction timeline of this critical reliability project. One such

⁸¹ Oncor/AEP Ex. ___ at 12-20 (Peppard Rebuttal).

example is TPWD's recommendation to refrain from clearing activities for approximately six months of the year.⁸² TPWD further recommends certain practices associated with migratory birds as well as threatened, endangered, and rare species. Applicants will comply with the Migratory Bird Treaty Act, the Endangered Species Act, and other applicable federal and state laws pertaining to these species.⁸³

TPWD's comment letter addressed issues relating to impacts on ecology and the environment, but did not consider other factors the Commission and the Applicants must consider in CCN applications.⁸⁴ Consistent with the testimony of Commission Staff witness David Bautista, the ordering paragraphs historically adopted by the Commission in transmission line CCN cases should be adopted in this case, including those relating to environmental issues.⁸⁵ To the extent TPWD made other or more expansive recommendations or comments, they should be disregarded as either impractical or inconsistent with PURA § 37.056(c) or 16 TAC § 25.101.

TPWD recommended route 324, arguing that it appears to best minimize adverse impacts to natural resources while maintaining a shorter route length and paralleling existing corridors for a portion of the route.⁸⁶

[Remainder of briefing under this heading relates to contested routing issues]

VII. OTHER ISSUES

8. *Are the circumstances for this line such that the seven-year limit discussed in section III of this order should be changed?*

The default seven-year limit should be sufficient for the Applicants to safely and reliably construct and energize the line. Should additional time be required, the Applicants will request an extension from the Commission in advance. Accordingly, the Applicants have satisfied Issue No. 8.

⁸² Oncor/AEP Ex. __ at 15 (Peppard Rebuttal).

⁸³ Oncor/AEP Ex. __ at 17 (Peppard Rebuttal).

⁸⁴ TPWD Letter at 4 (Jan. 15, 2019).

⁸⁵ Oncor/AEP Ex. __ at 15, 17 (Peppard Rebuttal).

⁸⁶ TPWD Letter at 5 (Jan. 15, 2019).

VIII. CONCLUSION

The preceding issues are uncontested based on the filed testimony of the parties to this case. Applicants respectfully reserve their right to brief contested issues and to supplement the briefing of these issues in accordance with the established deadlines.

IX. PROPOSED FINDINGS OF FACT

Description of Proposed Transmission Facilities

1. Oncor Electric Delivery Company LLC (Oncor) is an investor-owned electric utility providing service under certificate of convenience and necessity (CCN) number 30158.
2. AEP Texas Inc. (AEP Texas) is an investor-owned electric utility providing service under CCN number 30170.
3. On November 7, 2018, Oncor and AEP Texas (together, applicants) filed an application to amend their CCNs for a 345-kV transmission line in Pecos, Reeves and Ward counties.
4. The proposed transmission facilities consist of a new double-circuit 345-kV line built on lattice steel tower structures, extending from Oncor's Sand Lake Switch in Ward County to AEP Texas' Solstice Switch in Pecos County.
5. The new 345-kV transmission line is approximately 44.5 to 58.7 miles in length, depending on the selected route.
6. The proposed transmission facilities also include station work at Sand Lake and Solstice.
7. The application included one route that Applicants believe best meets the requirements of PURA and the Commission's rules (route 320) and 28 additional alternative routes for the transmission facilities, which were selected from among 408 preliminary alternative routes Halff developed.
8. The estimated construction costs of the filed routes range from approximately \$98,220,000 to \$126,903,000, excluding station costs.
9. The routes are based on a right-of-way width of approximately 160 feet. Zero percent of the necessary right-of-way has already been acquired.

10. The applicants will own, operate, and maintain their respective portions of the transmission line facilities including conductors, wires, structures, hardware, and easements.

Notice and Sufficiency of Application

11. On November 7, 2018, the applicants did the following: (1) provided written notice of the filing of the application, including a link table, route descriptions, and maps, to each county government in which any portion of the proposed facilities may be located; (2) provided written notice of the filing of the application, including a link table, route descriptions, and maps, to each municipality within five miles of the proposed facilities; (3) provided written notice of the filing of the application, including a link table, route descriptions, and maps, to each neighboring utility service within five miles of the proposed facilities; (4) provided written notice of the filing of the application, including a link table, route descriptions, and maps, to the Texas Office of Public Utility Counsel (OPUC); (5) provided written notice of the filing of the application, including a link table, route descriptions, and maps, to the Department of Defense Siting Clearinghouse; (6) provided written notice of the filing of the application, including a link table, route descriptions, and maps, to certain pipeline owners/operators; and (7) provided written notice of the filing of the application, including a link table, route descriptions, and maps, by first-class mail to each owner of land as stated on current county tax roll(s) that will be directly affected if the requested certificate is granted.
12. On November 20, 2018, the applicants filed an affidavit attesting to, among other things, their provision of a copy of the environmental assessment and alternative route analysis to the Texas Parks and Wildlife Department (TPWD) and notice and a copy of the application to OPUC, municipalities, counties, neighboring utilities, the Department of Defense Siting Clearinghouse, and directly affected landowners.
13. On November 26, 2018, Commission Staff recommended that the applicants' application be deemed sufficient.
14. On November 28, 2018, the applicants filed an affidavit attesting to notice of the application published on November 15, 2018, in newspapers having general circulation in the counties where the CCN is being requested, including the *Monahans News* (Ward

County), the *Fort Stockton Pioneer* (Pecos County), and the *Pecos Enterprise* (Reeves County).

15. On December 6, 2018, Commission Staff recommended that applicants' notice be deemed sufficient.
16. On December 10, 2018, SOAH Order No. 2 was issued approving of applicants' notice based on Commission Staff's recommendations and concluding the application was completed and sufficient to initiate review.
17. On January 14, 2019, the applicants filed a supplemental affidavit attesting to re-sent notices provided to certain directly affected landowners.
18. On January 24, 2019, SOAH Order No. 4 was issued approving the applicants' supplemental notice affidavit as compliant with Commission rules.

Procedural History

19. On November 7, 2018, the applicants filed the direct testimony of their witnesses: Russell J. Marusak; Wilson P. Peppard; Thomas W. Reynolds, III; Brenda J. Perkins; and Brent R. Kawakami. AEP Texas filed corrected direct testimony of Thomas W. Reynolds, III, on November 29, 2019.
20. On November 7, 2018, applicants as well as LCRA Transmission Services Corporation (LCRA TSC) filed a motion to consolidate the consideration of this project with AEP Texas and LCRA TSC's proposed Bakersfield to Solstice 345-kV transmission line project (Bakersfield to Solstice Project) originally filed in Commission Docket No. 48787, to issue a protective order, and to refer this matter to the State Office of Administrative Hearings (SOAH).
21. On November 14, 2018, the Commission issued an order of referral and preliminary order, referring this matter to SOAH for assignment of an ALJ to conduct a hearing and issue a proposal for decision and and requesting a list of issues to be addressed and not to be addressed in this proceeding.
22. On November 15, 2018, SOAH Order No. 1 was issued granting the applicants' and LCRA TSC's joint motion to consolidate and requested protective order, providing notice of a prehearing conference, describing jurisdiction, requesting a proposed procedural schedule,

establishing an intervention deadline, referencing the statutes and rules involved, establishing filing and service requirements, informing parties that they were required to file written testimony or a statement of position, emphasizing that any party who failed to file written testimony or a statement of position would be dismissed from the proceeding, and providing other information.

23. On December 10, 2018, SOAH Order No. 2 was issued wherein the ALJs memorialized the prehearing conference held on November 27, 2018, provided notice of the hearing on the merits at the SOAH office in Austin beginning at 9:00 a.m. on February 15, 2019, adopted a procedural schedule, and suspended the requirement of traditional service. In addition, SOAH Order No. 2 granted intervenor status to the following parties interested in the Sand Lake – Solstice project: Alan Zeman (Zeman); the City of Garland; and Oxy (comprised of Occidental Permian Ltd.; Oxy Delaware Basin, LLC; Oxy USA Inc.; Oxy USA WTP LP; Houndstooth Resources, LLC; and Occidental West Texas Overthrust, Inc.).
24. From January 8-10, 2019, various intervenors filed direct testimony or a statement of position.
25. On January 15, 2019, SOAH Order No. 3 was issued granting intervenor status to the following parties interested in the Sand Lake – Solstice project: Cross V Ranch, LP; Barbour, Inc.; Forrister Generation-Skipping Trust (Forrister); Plains Marketing, L.P. and Plains Pipeline, L.P. (Plains); and COG Operating LLC (COG). Other intervenors granted party status only had an interest in the Bakersfield to Solstice Project. In addition, SOAH Order No. 3 granted the City of Garland’s motion to withdraw as a party to this case.
26. On January 15, 2019, TPWD filed a letter dated January 11, 2018 (sic), regarding the proposed transmission facilities and made various comments and recommendations.
27. On January 18, 2019, Commission Staff filed an objection to and motion to strike portions of certain intervenors’ direct testimony regarding: (1) electromagnetic fields and associated health concerns; (2) anticipated future uses of property or diminution in property values; and (3) construction-related transmission outages; alternatively, Commission Staff requested that these portions of direct testimony be accorded appropriate evidentiary weight if found to be general statements of concern.

28. On January 18, 2019, the applicants and LCRA Transmission Services Corporation (LCRA TSC) filed a joint letter, in compliance with SOAH Order No. 3, identifying the intervenors who did not file direct testimony or a statement of position as of the date of the letter.
29. On January 24, 2019, SOAH Order No. 4 was issued identifying intervenors who failed to file testimony or a statement of position by the January 10, 2019, deadline and proposed to remove these intervenors as parties to the proceeding.
30. On January 30, 2019, SOAH Order No. 5 was issued, which overruled Commission Staff's objections and denied the motion to strike but granted its alternative request, determining that the direct testimony will be considered intervenor statements of concern and given the appropriate evidentiary weight.
31. On January 30, 2019, Commission Staff filed the direct testimony of its witness, David Bautista.
32. On February 4, 2019, COG Operating LLC (COG) filed the cross-rebuttal testimony of Brent Lowery.
33. On February 4, 2019, Oxy filed the cross-rebuttal testimony of Albert Mendoza.
34. On February 6, 2019, the applicants filed the rebuttal testimony of Russell J. Marusak; Wilson P. Peppard; Thomas W. Reynolds, III; and Brenda J. Perkins.
35. On February 6, 2019, the applicants moved to admit the direct testimony of Brent R. Kawakami into the evidentiary record because there was no challenge to project need.
36. On February 8, 2019, SOAH Order No. 6 was issued, which cancelled the need phase of the hearing on the merits, scheduled a prehearing conference in its place, and admitted Mr. Kawakami's testimony into evidence.

Adequacy of the Application

37. The application's 29 geographically diverse routes are an adequate number of reasonably differentiated alternative routes to conduct a proper evaluation.

Adequacy of Existing Service and Need for Additional Service

38. The proposed transmission facilities are needed to: (1) support load growth in the Far West Texas area; (2) address reliability violations under Electric Reliability Council of Texas (ERCOT) reliability criteria and North American Electric Reliability Corporation (NERC) reliability standards; and (3) provide the infrastructure necessary to facilitate future transmission system expansion to continue to support that load growth.
39. The Far West Texas area is experiencing rapidly growing load due primarily to oil and natural gas production, processing, and transportation, as well as associated economic expansion. On the nearby Culberson Loop transmission lines, between 2012 and 2017 the load rose from 29.3 megawatts (MW) to 246.4 MW, a more than eight-fold increase.
40. Based solely on actual load increases for Oncor substations and confirmed customer load increases (based on financially committed customer contracts), loads on the Culberson Loop lines are expected to increase significantly, with projected 2019 non-coincident summer peak load on these lines of 902 MW, and ultimately 1,549 MW of projected non-coincident summer peak load on these lines by 2022.
41. If the load projection parameters are expanded to take into account pending requests that are currently being studied and contractually negotiated between Oncor and customers, there is a probable likelihood of even further growth for non-coincident summer peak loads; current projections estimate that, for 2020, the non-coincident summer peak load grows to 1,406 MW; for 2021, it grows to 1,563 MW; and for 2022, it grows to 1,639 MW.
42. In April 2016, Oncor and AEP Texas submitted for review by ERCOT's Regional Planning Group (RPG), an independent organization under PURA § 39.151, a suite of projects known as the "Far West Texas Project."
43. ERCOT performed steady state and dynamic stability power flow studies during its independent review of the Far West Texas Project and found multiple violations under North American Electric Reliability Corporation (NERC) Reliability Standard TPL-001-4.
44. ERCOT's steady state analysis when reviewing the Far West Texas Project identified the following violations: thermal violations on multiple lines in the Barilla Junction Area under single contingencies in both generation cases it studied; unsolvable contingencies; and

various voltage violations and unacceptable voltage deviations in the Culberson Loop under one or both cases studied.

45. ERCOT conducted detailed analyses and tests of four short-listed options and, in June 2017, ERCOT's Board of Directors endorsed construction of, among other things, a new 345 kV transmission line extending from Bakersfield to Solstice, to be built by LCRA TSC and AEP Texas on double-circuit-capable 345 kV structures with one 345 kV circuit initially installed, and expansion of Solstice to include the installation of a 345 kV ring-bus arrangement with two 600 MVA, 345/138 kV autotransformers.
46. In February 2018, Oncor submitted a suite of projects known as the "Far West Texas Project 2" to the ERCOT RPG.
47. ERCOT conducted an independent review of the Far West Texas Project 2, found multiple reliability violations under NERC Reliability Standard TPL-001-4, and conducted detailed analyses of three short-listed options. In June 2018, ERCOT's Board of Directors endorsed construction of, among other things, a variation of the proposed Far West Texas Project 2 to include the Sand Lake—Solstice double-circuit 345 kV line, expansion of Sand Lake Switch, and a second circuit on the Bakersfield—Solstice line, and it endorsed them as Tier 1 transmission projects needed to support the reliability of the ERCOT transmission system. Further, ERCOT's Board of Directors endorsed the proposed transmission facilities as critical to the reliability of the ERCOT transmission system pursuant to 16 Texas Administrative Code (TAC) § 25.101(b)(3)(D).
48. The Commission's certification rule, 16 Texas Administrative Code (TAC) § 25.101(b)(3)(A)(ii)(I), states that ERCOT's recommendation shall be given great weight in determining the need for a proposed transmission line project.
49. As approved by ERCOT, the Far West Texas Project 2 includes the following components relevant to the proposed transmission facilities: (i) expansion of the Sand Lake Switching Station to install two new 600 MVA, 345/138 kV autotransformers; and (ii) construction of an approximately 40-mile, 345 kV transmission line on double-circuit structures, with two circuits in place between Sand Lake and Solstice.

50. During the course of its independent reviews, ERCOT evaluated numerous alternatives based on variations of different transmission solutions before endorsing the proposed transmission facilities as components of ERCOT's overall recommended transmission solution.
51. ERCOT used cost and reliability performance comparisons to further narrow its analysis to several short-listed options to resolve the identified NERC violations, each of which included the proposed transmission facilities.
52. The proposed transmission facilities will facilitate robust wholesale competition by facilitating the delivery of economical electric power at 345 kV from existing and future generation resources located both inside and outside of the project study areas to existing and future electric customers in those areas.
53. The proposed transmission facilities are not proposed to interconnect new transmission service customers.
54. Electric customers within the area of the proposed transmission facilities and other customers in the ERCOT system will benefit from the improved transmission system reliability and capacity provided by the proposed transmission facilities.
55. Voltage upgrades, conductor bundling, and additional transformers were each considered and rejected as inadequate alternatives.
56. Distribution alternatives to the proposed transmission facilities were considered and rejected because they would not improve the reliability and operational capability of the transmission system in the area.
57. All existing transmission facilities in the study areas were constructed and operate at 138 kV, and serve customers directly; thus, upgrading of voltage would require all customers and existing stations to be rebuilt in order to be served from 345 kV.
58. Conductor bundling would not address the reliability and operational issues under the contingencies of concern since any bundled circuits would necessarily be located on the same structures as the existing 138 kV lines in the area. Additionally, bundling conductors does not provide bi-directional looped service capability which is needed to address the reliability and operational flexibility for existing and future customers.

59. Adding transformers would not address the reliability and operational issues under the contingency of concern since new 345/138 kV transformers within the Culberson Loop would still be served from the planned Odessa EHV—Riverton / Moss—Riverton 345 kV transmission line.
60. The proposed transmission facilities will address critical reliability issues resulting from rapid load growth in an area of oil and natural gas development and associated economic expansion; more specifically, the proposed transmission facilities will support load growth in the area, address reliability violations under ERCOT protocols and NERC reliability standards, and provide infrastructure necessary to facilitate future transmission system expansion, all of which will improve service for new and existing customers in the area.
61. The proposed transmission facilities will deliver 345-kV transmission to an area that is not currently served at this voltage.
62. The proposed transmission facilities are the best way to ensure adequate voltage in the Far West Texas area based on considerations of engineering, efficiency, reliability, costs, and benefits.
63. The proposed transmission facilities will improve transmission service in the Far West Texas area.
64. No party has challenged the need for the proposed transmission facilities.

Routes

65. To assist the applicants in their route selection process for the transmission facilities, the applicants retained Halff Associates, Inc. (Halff) to prepare an environmental assessment and alternative route analysis.
66. The transmission facilities will be generally constructed on double-circuit lattice steel structures.

[Remainder of potential findings of fact under this heading are contested issues]

Community Values

67. To develop information on community values for the transmission facilities, the applicants held a public meeting in Pecos, Texas on August 15, 2018, from 4:00 p.m. to 7:00 p.m. in accordance with 16 Texas Administrative Code (TAC) § 22.52.
68. A total of 775 individual written notices of the public meeting were mailed to directly affected landowners.
69. Oncor, on behalf of the applicants, provided the Department of Defense Siting Clearinghouse with notice of the public meeting.
70. A total of nine people signed in as attending the public meeting, including one member of the local media and one local official.
71. One person submitted a questionnaire at the public meeting, and electronic data was received from the local official attendee after the meeting.
72. When selecting the recommended and alternative routes, the applicants considered and incorporated information from the public meeting and from local, state, and federal agencies.
73. On September 17, 2018, the Department of Defense Siting Clearinghouse informed the applicants that its informal review concluded that the proposed transmission facilities would have minimal impact on military operations in the area.
74. Based on information received by Halff from the public involvement program, in consultation with the applicants, and subsequent reconnaissance surveys, portions of 36 existing preliminary route links were modified, and several were divided for a net increase of five alternative links.

[Remainder of potential findings of fact under this heading are contested issues]

Recreational and Park Areas

[Potential findings of fact under this heading are contested issues]

Historical Values

[Potential findings of fact under this heading are contested issues]

Aesthetic Values

[Potential findings of fact under this heading are contested issues]

Effect of Granting the CCN on Other Utilities

75. The proposed transmission facilities will not adversely affect service by other utilities in the area and will improve system reliability and capacity in the area.

Environmental Integrity

76. The environmental assessment and alternative route analysis analyzed the possible impacts of the transmission facilities on numerous different environmental factors.
77. The applicants and Halff appropriately performed an evaluation of the impacts of the transmission facilities on the environment, including endangered and threatened species.
78. It is appropriate that the applicants minimize the amount of flora and fauna disturbed during construction of the transmission facilities.
79. It is appropriate that the applicants re-vegetate cleared and disturbed areas using native species and consider landowner preferences in doing so.
80. It is appropriate that the applicants avoid, to the maximum extent reasonably possible, causing adverse environmental impacts to sensitive plant and animal species and their habitats as identified by TPWD and the United States Fish and Wildlife Service.
81. It is appropriate that the applicants implement erosion control measures and return each affected landowner's property to its original contours and grades unless otherwise agreed to by the landowners. It is not appropriate that the applicants restore original contours and grades where different contours and grades are necessary to ensure the safety or stability of any transmission line's structures or the safe operation and maintenance of the transmission lines.
82. It is appropriate that the applicants exercise extreme care to avoid affecting non-targeted vegetation or animal life when using chemical herbicides to control vegetation within the right-of-way, and such herbicide use must comply with the rules and guidelines established in the Federal Insecticide, Fungicide, and Rodenticide Act and with Texas Department of Agriculture regulations.

83. It is appropriate that the applicants use best management practices to minimize the potential impact to migratory birds and threatened or endangered species.

[Remainder of potential findings of fact under this heading relate to contested routing issues]

Probable Improvement of Service or Lowering of Consumer Cost

84. The transmission facilities are needed to satisfy reliability and load growth issues in the project area, and they will result in improved service to electric customers for the reasons described in the findings of fact addressing the need for the transmission facilities.

Engineering Constraints

85. The area encompassing the transmission facilities is undergoing rapid development in energy infrastructure.

[Remainder of potential findings of fact under this heading relate to contested routing issues]

Estimated Costs

86. Oncor intends to finance its portion of the transmission facilities with a combination of debt and equity in compliance with its authorized capital structure.
87. AEP intends to finance its portion of the transmission facilities with a combination of debt and equity.

[Remainder of potential findings of fact under this heading relate to contested routing issues]

Structures: Transmitters, Airports, Airstrips, and Irrigation Systems

[Potential findings of fact under this heading relate to contested routing issues]

Using or Paralleling Compatible Rights-of-Way and Paralleling Property Boundaries

[Potential findings of fact under this heading relate to contested routing issues]

Prudent Avoidance

[Potential findings of fact under this heading relate to contested routing issues]

TPWD's Comments and Recommendations

88. On January 15, 2019, TPWD filed a letter dated January 11, 2018 (sic), making various comments and recommendations regarding the transmission facilities.
89. TPWD's comment letter addressed issues relating to impacts on ecology and the environment, but did not consider the other factors the Commission and utilities must consider in CCN applications.
90. The applicants will comply with all environmental laws and regulations, including those governing threatened and endangered species.
91. The applicants will comply with all applicable regulatory requirements in constructing the transmission facilities, including any applicable requirements under § 404 of the Clean Water Act.
92. In preparing the environmental assessment and alternative route analysis, Halff reviewed and took into account TPWD's previous correspondence in this docket.
93. Halff relied on habitat descriptions from various sources, including the Texas Natural Diversity Database and other sources provided by TPWD, along with observations from field reconnaissance, to determine whether habitat for some species is present in the area encompassing the transmission facilities.
94. The applicants will coordinate with United States Fish and Wildlife Service and TPWD if threatened or endangered species' habitats are identified during field surveys.
95. Environmental permitting and mitigation measures are determined after a route is approved by the Commission and on-the-ground surveys are completed for the route. Should construction impact federally-listed species or their habitat or impact water under the jurisdiction of the United States Army Corps of Engineers or the Texas Commission on Environmental Quality (TCEQ), the applicants will coordinate with the United States Fish and Wildlife Service, United States Army Corps of Engineers, and TCEQ as appropriate to coordinate permitting and any required mitigation.
96. The standard mitigation requirements included in the ordering paragraphs in this Order, coupled with the applicants' current practices, are reasonable measures for a transmission

service provider to undertake when constructing a transmission line and are sufficient to address TPWD's comments and recommendations.

Permits

97. The applicants will obtain a permit from the Texas Department of Transportation if the transmission facilities cross state-owned or -maintained properties, roads, or highways.
98. Before constructing the transmission facilities, the applicants will obtain any necessary permits or clearances from federal, state, or local authorities.

Coastal Management Program

99. No part of the transmission facilities is located in the boundary of the Coastal Management Program as defined in 31 TAC § 501.3(b).

Effect on the State's Renewable Energy Goal

100. The Texas Legislature established a goal in PURA § 39.904(a) for 10,000 megawatts of renewable capacity to be installed in Texas by January 1, 2025. This goal has already been met.
101. The transmission facilities will not adversely affect the goal for renewable energy development established in PURA § 39.904(a).

Limitation of Authority

102. It is reasonable and appropriate for a CCN order not to be valid indefinitely because it is issued based on the facts known at the time of issuance.
103. Seven years is a reasonable and appropriate limit to place on the authority granted in this Order to construct the transmission facilities.

X. PROPOSED CONCLUSIONS OF LAW

1. Oncor is a public utility as defined in PURA § 11.004 and an electric utility as defined in PURA § 31.002(6).
2. AEP Texas is a public utility as defined in PURA § 11.004 and an electric utility as defined in PURA § 31.002(6).

3. Oncor and AEP Texas must obtain the approval of the Commission to construct the proposed transmission line and provide service to the public using that line.
4. The Commission has jurisdiction and authority over this matter under PURA §§ 14.001, 32.001, 37.051, 37.053, 37.054, and 37.056.
5. SOAH has jurisdiction to conduct a hearing on the merits and to prepare a proposal for decision under PURA § 14.053 and Texas Government Code §§ 2003.021 and 2003.049.
6. The applicants provided proper notice of the application in compliance with PURA § 37.054 and 16 TAC § 22.52(a).
7. The application is sufficient under 16 TAC § 22.75(d).
8. The hearing on the merits was set, and notice of the hearing was provided, in compliance with Texas Government Code §§ 2001.051 and 2001.052.
9. This docket was processed in accordance with the requirements of PURA, the Administrative Procedure Act,⁸⁷ and Commission rules.
10. The Texas Coastal Management Program does not apply to the transmission facilities, and the requirements of 16 TAC § 25.102 do not apply to the application.
11. The proposed transmission facilities using route ____ are necessary for the service, accommodation, convenience, or safety of the public within the meaning of PURA § 37.056.
12. Route ____ complies with PURA § 37.056(c)(4) and 16 TAC § 25.101, including the Commission's policy of prudent avoidance, to the extent reasonable to moderate the impact on the affected community and landowners.

XI. PROPOSED ORDERING PARAGRAPHS

In accordance with these findings of fact and conclusions of law, the Commission issues the following orders:

1. The Commission approves Oncor's and AEP Texas's application to build a new double-circuit 345 kV transmission line extending from Oncor's Sand Lake Switch in Ward County to AEP Texas's Solstice Switch in Pecos County. The approved route for the transmission facilities is route ____ as described in the EA and finding of fact ____, with modifications to links ____ as requested by ____ and described in findings of fact ____.

⁸⁷ Tex. Gov't Code §§ 2001.001-.902.

2. The Commission amends Oncor's CCN number 30158 to include construction and operation of the transmission facilities requested from Sand Lake Switch to ____.
3. The Commission amends AEP Texas' CCN number 30170 to include construction and operation of the transmission facilities requested from Solstice Switch to ____.
4. The authority granted by this Order is limited to a period of seven years from the date the order is signed unless, before that time, the transmission line is commercially energized.
5. If the applicants encounter any archaeological artifacts or other cultural resources during construction of the transmission facilities, work must cease immediately in the vicinity of the artifact or resource. The applicants must report the discovery to the Texas Historical Commission (THC) and take action as directed by the THC.
6. The applicants must follow the procedures to protect raptors and migratory birds as outlined in the following publications: *Reducing Avian Collisions with Power Lines: State of the Art in 2012*, Edison Electric Institute (EEI) and Avian Power Line Interaction Committee (APLIC); *Suggested Practices for Avian Protection on Power Lines, The State of the Art in 2006*, EEI, APLIC, and the California Energy Commission, Washington, DC and Sacramento, CA, 2006; and the *Avian Protection Plan Guidelines*, APLIC and USFWS, April 2005. The applicants must take precautions to avoid disturbing occupied nests and take steps to minimize the impact of construction on migratory birds during the nesting season of the migratory bird species identified in the area of construction.
7. The applicants must exercise extreme care to avoid affecting non-targeted vegetation or animal life when using chemical herbicides to control vegetation within the ROW. Herbicide use must comply with rules and guidelines established in the Federal Insecticide, Fungicide, and Rodenticide Act and with Texas Department of Agriculture regulations.
8. The applicants must minimize the amount of flora and fauna disturbed during construction of the transmission line, except to the extent necessary to establish appropriate ROW clearance for the transmission line. In addition, the applicants must re-vegetate using native species and must consider landowner preferences and wildlife needs in doing so. Furthermore, to the maximum extent practical, the applicants must avoid adverse environmental impact to sensitive plant and animal species and their habitats, as identified by TPWD and the USFWS.

9. The applicants must implement erosion control measures as appropriate. Erosion control measures may include inspection of the right of way before and during construction to identify erosion areas and implement special precautions as determined reasonable to minimize the impact of vehicular traffic over the areas. Also, the applicants must return each affected landowner's property to its original contours and grades unless otherwise agreed to by the landowner or the landowner's representative. The applicants must not be required to restore original contours and grades where a different contour or grade is necessary to ensure the safety or stability of the structures or the safe operation and maintenance of the line.
10. The applicants must use best management practices to minimize the potential impact to migratory birds and threatened or endangered species.
11. The applicants must cooperate with directly affected landowners to implement minor deviations in the approved route to minimize the impact of the transmission line. Any minor deviations in the approved route must only directly affect landowners who were sent notice of the transmission line in accordance with 16 TAC § 22.52(a)(3) or have waived notice and agreed to accept the transmission line across their property, and landowners that have agreed to the minor deviation, excluding public ROW.
12. The applicants must not be permitted to deviate from the approved route in any instance in which the deviation would be more than a minor deviation without further amending its CCN.
13. The applicants must conduct surveys, if not already completed, to identify metallic pipelines that could be affected by the transmission line and coordinate with pipeline owners in modeling and analyzing potential hazards because of alternating-current interference affecting pipelines being paralleled.
14. If possible, and subject to the other provisions of this Order, the applicants must prudently implement appropriate final design for the transmission lines so as to avoid being subject to the Federal Aviation Administration (FAA)'s notification requirements. If required by federal law, the applicants must notify and work with the FAA to ensure compliance with applicable federal laws and regulations. The applicants are not authorized to deviate materially from this Order to meet the FAA's recommendations or requirements. If a

- material change would be necessary to comply with the FAA's recommendations or requirements, then the applicants must file an application to amend their CCN as necessary.
15. The application must identify any additional permits that are necessary, must consult any required agencies (such as the United States Army Corps of Engineers and United States Fish and Wildlife Service), must obtain all necessary environmental permits, and must comply with the relevant conditions during construction and operation of the proposed transmission facilities.
 16. The applicants must update the reporting of the transmission facilities on their monthly construction progress report before the start of construction to reflect the final estimated cost and schedule in accordance with 16 TAC § 25.83(b). In addition, the applicants must provide final construction costs, with any necessary explanation for cost variance, after completion of construction when all charges have been identified.
 17. All other motions, requests for entry of specific findings of fact or conclusions of law, and any other requests for general or specific relief, if not expressly granted herein, are hereby denied.

[Remainder of potential ordering paragraphs relate to contested routing issues]

Respectfully submitted,

By: Winston Skinner / Jay

Jaren A. Taylor
State Bar No. 24059069
Winston P. Skinner
State Bar No. 24079348
VINSON & ELKINS LLP
Trammell Crow Center
2001 Ross Avenue, Suite 3900
Dallas, Texas 75201-2975
Telephone: (214) 220-7754
Facsimile: (214) 999-7754
jarentaylor@velaw.com
wskinner@velaw.com

**ATTORNEYS FOR ONCOR ELECTRIC
DELIVERY COMPANY LLC**

Jerry N. Huerta
Jerry N. Huerta
State Bar No. 24004709
American Electric Power Service Corporation
400 West 15th Street, Suite 1520
Austin, TX 78701
(512) 481-3323
(512) 481-4591 (fax)
jnhuerta@aep.com

Kerry McGrath
State Bar No. 13652200
Duggins Wren Mann & Romero, LLP
600 Congress Avenue, 19th Floor
Austin, Texas 78701
(512) 744-9300
(512) 744-9399 (fax)
kmcgrath@dwmrlaw.com

ATTORNEYS FOR AEP TEXAS INC.

CERTIFICATE OF SERVICE

It is hereby certified that a copy of the foregoing has been hand-delivered or sent via courier service, email, fax, overnight delivery, or first class United States mail, postage prepaid, to all parties of record in this proceeding, on the 12th day of February, 2019.


